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June 2010

Online at <https://mpra.ub.uni-muenchen.de/66547/>

MPRA Paper No. 66547, posted 10. September 2015 13:59 UTC

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SUSTAINMED Working paper

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Abstract

The study focused on human development indicators in rural Egypt, not only because the rural population is close to 60% and 60% of the rural household income from agricultural production, where the traditional agriculture system is of holdings smaller than 5 Feddans represents 80% of the landholdings. They perform under limitations of labor intensive, traditional irrigation technologies, and they suffer from high rural/urban human gap.

The concerned human development indicators were the rural/Urban gap, poverty, income distribution, labor force structure and employment, health status, education and migration, the allocation and productivity of agricultural resources, particularly land, water and energy. The food Security development was assessed through the self-sufficiency ratios, dietary consumption pattern and the role of food and agriculture sectors in the national economy.

Keywords: Rural/Urban Gap, Employment, migration, Agricultural Resources, Food security

Introduction

The study focused on human development indicators in rural Egypt, not only because the rural population is close to 60% of the total, but also because 60% of the rural household income is from agricultural production (Aboul Einein, S., et. el, 2010), and agriculture resources are managed by the citizens of rural community. Therefore, the concerned indicators present the performances of human and natural resources utilized for agricultural production.

There are limitations in the studies and/or reports that concern simultaneously both urban and rural human development indicators. Whereas the World Bank Development indicators reports almost concern the national annual averages, the regularity of issuing the regional country reports, particularly, Human Development Reports(HDIR) are also constraints by available national social surveys. In Egypt the available field surveys are almost six. These are Population census, conducts each 10 years, Labor Force Survey, suppose to be carried annually on a quarterly basis,, Survey of Young People in Egypt, Egypt Household Education Survey, Egypt Demographic and Health Survey, which are conduct on irregular base and finally, Household Income Expenditure and Consumption Survey, which is the most important one. However, up to 1990 was conducting each 10 years, then each 5 years till 2005. Recently, it has been decided to be conducted each 3 years (Fabiosa and Soliman, 2008). The most recent one was for the year 2008/2009. Irregularity and Lag al least three year, of publication, constrained the continuity of annual or at least biannual human development reports (HDR) of UNDP, which is mainly constraint by the household survey publication schedule. The study expanded the criteria and indicators of Natural Resources and Food Security, to be more satisfactory, realistic and unbiased estimates, than those presented by HDR and World Bank development indicators.

Egypt Administrative Regions

Usually, the rural development indicators in Egypt are published according to the administrative regions presented in (Table 1) and (Figure 1). Egypt area is 1,000,000 (1 Million Square kilometers) divided into 29 governorates, each headed by a governor appointed by the president. These governorates are subdivided into districts and sub districts. Each governorate has a capital city which is the headquarter of administrative bodies of the governorate are located. Cairo is the capital of Egypt of a population of around 15 million inhabitants and Alexandria is the second major city of the country although it is not the city with largest area.

Urban Governorates include big cities, and Lower Egypt, tentatively, includes the governorates within the Nile Delta area. Upper Egypt includes governorates along the Nile valley extends from south to Cairo up to Sudan borders. The frontier governorates are the North West shore of Mediterranean Sea "Matrouh governorate", New Valley governorate (west desert of Egypt, including the main Oases), the Red Sea Governorate which extends along the Red sea shore and the two governorates of Sinai (North and South Sinai). Whereas the frontier governorates occupy the majority of Egypt land they all include less than one and half million citizens (CAPMASa, 2010) Accordingly, the analysis of this study excluded frontier governorates indicators from most of the analysis, due to their low population density of these areas.

Table 1 Administrative Regions of Egypt by Governorate

Urban Governorates	Lower Egypt Governorates		Upper Egypt Governorates		Frontier Governorates
Cairo	Damietta	Gharbia	Giza	Suhag	New Valley
Alexandria	Dakahlia	Menoufia	Beni Suef	Qena	Matrouh
Port Said	Sharkia	Behera	Fayoum	Luxor	North Sinai
Suez	Kaliopya	Ismailia	Menia	Aswan	South Sinai
	Kafr El-Sheikh		Asyut	Helwan & 6 October	Red Sea

Source: (CAPMASa, 2010)

Figure 1 Egypt Administrative Map



Rural/Urban Gap of Major Human Development Indicators

The measurement of the Human Development Indicators (HDI) gap between rural and urban areas has focused on calculating rural as a percentage of urban area for the four major indicators: Population size, access to safe water, access to sanitation and the literacy rate. In terms of population size, the size of the rural population has always been higher than the urban population. The ratio of the rural to the urban population has fluctuated from a low 127% in 1995 to a high of 135% in 2005, to reach 133% in 2010 (UNDP 2010). Whereas, there was a clear reduction in the gap between urban and rural areas in terms of safe water supply, and the literacy rate along the last two decades, the gap was high with regard to sanitation up to 2005, (Table 2). The ratio of sanitation supply in the rural to urban areas reached only 29.5% in 2008 due to big leap taken for urban development. Since 2008, significant improvement in rural infrastructure development has been conducted that made such gap 41.8% in 2010. Furthermore, the gap in literacy rate decreased to 78.4% in 2008 and 79.4% in 2010. The targeting program to combat poverty and the selection of the poorest 1000 villages, as presented in the previous working paper (Soliman and Gaber, 2010), can thus be considered a welcome attempt to further narrow the gap between rural and urban areas.

Table 2 Relative Gap between Rural and Urban

%(Rural/Urban)	1995	97/1998	2000/01	2003	2004	2005	2008	2010
Population	127.0%	134.0%	135.0%	133.0%	135.0%	140.0%	135.0%	133.0%
Safe Water	63.0%	73.2%	76.7%	84.2%	84.2%	84.2%	94.0%	96.9%
Sanitation	59.0%	73.0%	90.3%	78.5%	78.5%	78.5%	29.5%	41.8%
Literacy Rate	55.0%	62.5%	63.7%	67.6%	67.7%	67.7%	78.4%	79.4%

Source: UNDP Egypt Human development Report in 1990, 1996-1997, 2001, 2002-2003, 2004, 2008, and 2010

Poverty and Income distribution in Urban and Rural Egypt

Since 1994, Egypt's Human Development Reports and the growing number of indicators of well-being have consistently shown the persistent level of deprivation of rural communities. They are deprived in terms of physical infrastructure facilities as well as education access and outcomes. Moreover, the quantity and diversity of job opportunities is far more restricted in rural Egypt and can explain the strong tendency for rural-urban migration and the very fast expansion of informal Slums (Ashwaiyat) which offer intermediate earnings and living conditions between rural and urban regions (ILO, 2008). The poverty rates in the HDR of Egypt for the year 2010 relied on the results of Income and Expenditure survey 2008/ 2009 (CAPMASb, 2009). Table 3 shows that the poor are concentrated in rural areas and particularly those in Upper Egypt.

Where the gross national product (GNP) per capita expresses a national average of wealth, it does not provide an insight into the levels of actual wealth distribution to individuals within the state. Accordingly, Gini coefficient provides a useful language to show the principal factors that characterize equality and inequality for nation states and communities inside states. By focusing on social equity the Gini coefficient provides a useful guide (Litchfield A, 1999). In Egypt Lorenz Curves and Gini Coefficients are estimated from the Household expenditure surveys conducted in Egypt since 1958/1959 till now, by "CAPMAS". The estimates usually are for urban and rural regions. Where Gini coefficients can be used usefully, as one means to discuss economic and social reform, to forecast upon trends towards civil violence, organized crime and migration rates, great care should be taken towards the veracity of the sources used to calculate it. While an increase in Gini Coefficient implies rising income disparity, it does not necessarily indicate worsening of the poverty situation because both the rich and the poor may become richer simultaneously. Therefore, to understand the poverty situation of a society, other income statistics should be considered in addition to Gini Coefficient (El Badawi, I., 1999).

Even though rural regions are poorer than urban, inequality in income distribution is less in rural than urban regions of Egypt (Table 3). However, the validity of the Gini coefficient depends upon the quality of the statistical data used to calculate it. There are several Gini formulas. Even where a uniform Gini formula is used to draw comparisons between regions and/or countries, there is not an agreed uniform methodology for the manner in which data is collected. Therefore, a Gini coefficient is vulnerable to being contaminated by those seeking to overstate inequality or by those wishing to present the inequality as a minimum. Therefore, Care should be taken to ensure the objectivity of Gini sources to mitigate error, (Lui, Hon-kwong, 1997)

Table 3 Income distribution and poverty in Urban and Rural of Egypt

Region	Expend/ Capita (EGP)	Income Share			Gini Coefficient		Poor persons (of total population %)		Wages of poor households (%) of	
		Lowest 40% people	of	20% /lowest (highest 20%)	Gini Coefficient	Ultra poor	Total		Their income	Total wages
Urban Govern. S	5832	20.10%		5.40%	35%	0.50%	6.90%		43.50%	4.60%
Lower Egypt	3556	26.30%		3.00%	23%	2.00%	14.20%		41.00%	10.30%
Urban	4327	15.10%		8.00%	27%	0.80%	7.30%		38.40%	4.90%
Rural	3275	32.30%		1.80%	20%	2.50%	16.70%		41.40%	12.50%
Upper Egypt	2916	23.40%		4.00%	28%	12.80%	36.90%		41.00%	27.70%
Urban	3879	12.80%		11.00%	33%	6.30%	21.30%		41.60%	14.70%
Rural	2501	43.70%		1.90%	23%	15.60%	43.70%		40.90%	34.60%
Egypt	3712	22.30%		4.40%	31%	6.10%	21.60%		41.30%	15.20%
Urban	4843	20.70%		5.10%	34%	2.60%	11.00%		41.40%	7.20%
Rural	2924	26.00%		3.10%	22%	8.50%	28.90%		41.20%	21.80%

Source: Estimated from: The Household Income & Expenditure Consumption Survey (HIECS) of 2008/2009, published by (CAPMAS) Center Agency for Public Mobilization and Statistics of Egypt Published in 2010

Income Distribution is most likely associated with income distribution pattern. The impulsion and motion to analyze income inequality is beneficial as poverty is a highly influential variable. Sørli, Gleditch and Strand (2004) claimed that Collier and Hoeffler's model of civil war" is due to a lack of economic and political opportunities, i.e. economic inequality. Such circumstances provide a fruitful base for frustration and opposition. They added that Poor countries or groups within a nation, trapped in poverty, have a greater propensity for violent conflict with a probability of conflict outbreak more than five percentage points above the global average.

Bloomberg S. Brock, Hess, George D (2002) stated that "reduced levels of domestic economic activity tend to create incentives for increased external and internal conflict, which in turn reinforces low levels of domestic economic activity". Therefore, a conflict-poverty trap emerges where conflict plays a role in reducing capital accumulation, and the lack of capital accumulation results in further conflict. Even though there is a recognized causal relationship between inequity and violence, Collier, P., (1999) claims that economic inequality was insignificant in causing civil war, the concluded that even if economic inequity is significant in causing civil war; the "Collier and Hoeffler's model of civil war" lacks a means to measure its influence.

Labor Force Structure and Employment

Although the private sector has been leading the investment for development plans over the last two decades in Egypt, the formal private sector has not sufficiently expanded its employment to absorb the large number of educated new entrants streaming onto the job market every year. On the other hand, government hiring of secondary school and university graduates has been severely curtailed in recent years. Faced with poor prospects of getting formal jobs in either the public or private sectors, young people are either forced to accept any jobs they can get in the informal economy. Youth unemployment is the dominant form of unemployment in Egypt. In 2006, over 80% of the unemployed were under the age of 29 and 82% of the unemployed had never worked before. The final results of the General Census of Population conducted in the year 2006 indicated that 10.4% of the population in the 6-18 years-old age group has not enrolled in education and that 4.3% dropped out (ILO, 2008)

Unemployment Rate

The unemployment rate is a very partial measure of the health of the labor market that depends as much on the level of expectations about getting formal employment. Thus, to ascertain what a decline in unemployment rates means, one has to examine a number of other labor market indicators including alternative definitions of unemployment, the labor force participation rate, and the newly introduced indicator called the "jobless rate", as well as information about the type of jobs young people are actually getting.

Unemployment rate is based on two alternative definitions of unemployment, namely the "standard unemployment rate" and "the broad unemployment rate". Both definitions are based on recommendations by the International Conference of Labor Statisticians that takes place under the auspices of the International Labor Organization (ILO, 2009). The standard definition of unemployment requires that a person not have worked a single hour during a reference week, be desiring to work, ready and available to start work within two weeks, and to have actively searched for work during some past reference period, typically the past month. The standard unemployment rate decreased from about 27% in 1996 to 18% in 2008 of the force power (15-59 Years old), (Table 4).

Table 4 Standard and Broad Youth Unemployment Rates (% of 15-59 Years old)

Region	Standard Rate (%)			Broad Rate (%)		
	1996	2006	2008	1996	2006	2008
Urban	26.6	21.5	17.9	30.2	24.2	23.0
Rural	25.0	13.9	15.8	27.9	15.5	22.2
Egypt	25.6	16.9	16.7	28.8	19.1	22.6

Source:

(1) The Egypt Labor Market Panel Survey Carried out by (ERF) the Economic Research Forum in cooperation with (CAPMAS) Central Agency for Public Mobilization and Statistics, Cairo, Egypt in 1998 and 2006

(2) The Survey of Young People in Egypt of 2009, carried out by the Population Council in cooperation with the Information and Decision Support Center of the Council of Ministers

In cases where labor markets are less structured or where searching for work appears fruitless, international recommendations allow for a broader definition that drops the active search criterion. Thus the broad definition of unemployment includes, within the ranks of the unemployed, individuals who are not working, ready and available for work, but have not engaged in any search activity. That group is often referred to as the "discouraged unemployed". Neither definition includes individuals who have worked an hour or more during the

reference week, but who wish to work more hours. The latter are considered employed but are considered visibly underemployed.

The jobless rate shows the consequences of low employment rates among the out-of-school population irrespective of the individual's desire to participate in the labor force. As such the jobless rate captures how much of the not-in-school population is either unemployed or inactive. Defined in this way, joblessness includes all forms of non-participation other than studying. It therefore could include mandatory military service for males.

Like the broad unemployment rate, the youth jobless rate declined from about 59% in 1998 to 53% in 2006 and then climbed back to just over 60% in 2009 (CAPMAS, 2009). The male jobless rate declined from 32% in 1998 to 21% in 2006, and then increased to 24% in 2009. In contrast, female joblessness modestly declined within the period (1998-2008) from about 86% to 81%, and then rose during the economic crisis period to reach 87% in 2009, a level that exceeds what it was in 1998.

There are still a small proportion of young people in Egypt (about 11% in 2006) who have never gone to school. These young people are almost never unemployed. If they enter the labor force, they usually transition to work early and generally work either in agriculture or in the informal economy (ILO, 2008). The slowing economy resulting from the onset of the world financial crisis in 2008 led to an increase in male joblessness for all educational categories except university graduates, which is the same trend observed for unemployment.

The different face of unemployment is seen through a glance at the figures of Table 5. There is a wide gap between the employment rate (1-Unemployment rate) and the wage earners rate. The later shows a high proportion of no wage earners among labor force. This is because the jobs and associated wages and salaries are subdivided into five classes: (i) public sector jobs; (ii) formal private sector wage and salary work; (iii) informal but regular private sector wage and salary work, (iv) Irregular Private sector wage work, and (v) self-employment and unpaid family work.

Table 5 Labor force and Unemployment Rate in both Urban and Rural by Governorate

Governorate	Total labor force (% of Population)	Wage earners (% of labor force)	Unemployment Rate (% of total Labor Force)				Labor force Structure (% of Labor Force)				
			Urban	Rural	Total	Wage earners)	Agriculture	Industry & construction	Service activities		
									Gov. & public	Other	Total
Cairo	29.9	77.4	11.8	0.0	11.9	22.6	0.4	41.7	30.1	27.8	57.9
Alexandria	32.0	60.8	12.2	0.0	12.2	39.2	3.0	33.7	40.7	22.6	63.3
Port Said	35.4	68.6	11.1	0.0	11.2	31.4	18.5	19.6	40.2	21.7	61.9
Suez	31.5	74.1	9.9	0.0	9.7	25.9	6.3	33.9	35.2	24.6	59.8
Damietta	32.7	64.7	10.7	4.5	6.7	35.3	20.1	37.3	25.4	17.2	42.6
Dakahlia	34.6	55.7	17.8	9.6	12.0	44.3	33.9	18.5	30.8	16.8	47.6
Sharkia	34.6	49.2	13.5	11.3	11.7	50.8	44.7	15.3	23.8	16.4	40.2
Kalyoubia	30.5	72.0	10.4	6.6	8.0	28.0	15.6	32.6	31.0	20.8	51.8
Kafr El Sheikh	35.8	35.9	16.1	8.3	10.0	64.1	48.9	14.3	22.9	13.9	36.8
Gharbia	34.3	56.7	14.3	11.0	12.0	43.3	24.5	26.5	28.3	20.7	49.0
Menoufia	35.1	60.3	10.0	5.6	6.5	39.7	32.9	18.8	27.3	21.0	48.3
Behera	38.2	36.5	11.8	5.7	6.8	63.5	59.3	10.4	18.9	11.4	30.3
Ismailia	32.4	67.6	13.2	9.2	11.1	32.4	25.6	20.8	32.4	21.2	53.6
Giza	29.3	67.3	8.3	4.1	6.7	32.7	11.1	32.6	40.7	15.6	56.3
Beni Suef	36.0	45.5	11.4	1.4	3.5	54.5	55.1	15.6	16.7	12.6	29.3
Fayoum	34.6	39.2	5.4	2.2	2.9	60.8	48.1	21.1	19.4	11.4	30.8
Menia	35.4	38.9	10.4	4.4	5.5	61.1	58.1	12.8	20.0	9.1	29.1
Asyut	28.3	64.8	13.6	6.1	8.3	35.2	39.0	12.7	32.0	16.3	48.3
Suhag	27.6	46.9	14.3	7.9	9.4	53.1	42.1	14.8	27.8	15.3	43.1
Qena	26.9	64.4	11.7	6.1	7.5	35.6	42.3	23.6	17.6	16.5	34.1
Luxor	29.5	69.6	21.5	11.8	17.2	30.4	20.6	9.1	47.8	22.5	70.3
Aswan	29.4	62.7	11.4	14.1	12.9	37.3	30.3	26.7	22.5	20.5	43.0
Red sea	30.6	81.2	2.0	0.0	2.0	18.8	7.9	39.8	24.3	28.0	52.3
New valley	42.1	60.6	16.9	10.0	13.3	39.4	33.4	7.4	30.1	29.1	59.2
Matrouh	29.6	57.9	0.0	10.6	3.6	42.1	4.3	21.7	61.9	12.1	74.0
North Sinai	27.7	66.3	5.7	0.0	3.8	33.7	23.9	16.4	32.1	27.6	59.7
South Sinai	38.9	61.0	9.5	5.6	7.8	39.0	20.8	15.2	41.7	22.3	64.0
EGYPT	32.4	56.6	11.7	7.0	8.9	43.4	31.7	22.1	27.5	18.7	46.2

Source:

(1) The Egypt Labor Market Panel Survey Carried out by (ERF) the Economic Research Forum in cooperation with (CAPMAS) Central Agency for Public Mobilization and Statistics, Cairo, Egypt in 1998 and 2006

(2) The Survey of Young People in Egypt of 2009, carried out by the Population Council in cooperation with the Information and Decision Support Center of the Council of Ministers.

A wage and salary job in the private sector is considered formal if the job holder has either a legal contract or social insurance coverage. It is considered regular if the job is either permanent or temporary and irregular if it is intermittent or seasonal. Another term used to describe irregular job is “casual” (Assaad, R., Roushdy, R., and Rashed, R. (2009). Table 5, also, shows the unemployment rate in both urban and rural regions of Egypt. However, the unemployment in rural regions requires further specialized research study. There are specific rural labor market behaviors. Such behaviors are related to farm family labor, seasonal demand for hired labor, in addition to the impact of expansion in agricultural mechanization over the last three decades (Soliman, 2006). These specific rural labor market behaviors require a specialized separate appraisal study.

Health Services Performance

The interdependence of factors influencing health outcomes in a vision of sustainable human development was exemplified in the Millennium Development Goals (MDGs) that place health at the heart of development with health-related aspects in each of the eight Goals. The MDGs are designed in a manner where the realization of each goal can have positive returns on health outcomes. Health is ultimately dependent on the vitality of natural's life-supporting processes and that investment in stronger multi-sectorial public health and primary preventive capacities within national policies can provide quick and positive health returns (League of Arab States and United Nations, 2007)

Table 6 Some Major Health Services Performance Indicators in Egypt

Region	Sub-Region	Households with access to		Ministry of heath capabilities			Beds/10000 Persons		Health Units/ 10000 Persons
		Piped Water (%)	Sanitation (%)	Doctors/ 10000 Persons	Nurses/ 10000 Persons	Nurses/ Doctors (%)	Total	Ministry of Health	
Urban Governorates		99.90%	96.80%	12.9	15.5	120%	29.8	9.9	3.6
Lower Egypt	Urban	99.80%	93.10%	24.6	47.7	194%	14	7.3	1
	Rural	98.10%	52.60%	2.3	10.3	448%			
Upper Egypt	Urban	100.00%	76.50%	16.8	30.6	182%	19.2	11.9	2.8
	Rural	95.00%	13.50%	1.9	6.7	353%			
Total Egypt	Urban	99.80%	89.80%	13.1	21.6	165%			
	Rural	96.70%	37.50%	2.1	8.9	424%			
	Total	98.20%	62.50%	6.9	14.3	207%	18.2	8.4	2.6

Source: Ministry of Health Cairo, Egypt, with El-Zanaty and Associates, and Macro International, (2009) “Egypt Demographic and Health Survey 2008”.

Although the households access to Piped Water has being almost full in both urban and rural Egypt, the households with access to sanitation network reached on the average 62.5% of Egypt households in 2008. Whereas Sanitation network reached about 97% of households in urban governorates, and 93% of Lower Egypt urban households, it was accessible to only 76% of urban households in Upper Egypt. In Rural regions the imbalance between access to piped water and sanitation network was the worst among Egyptian regions. Where the piped water reached 97% of the rural households only one-third of them have access to sanitation network. Only 13% of Rural households in Upper Egypt had access to sanitation in 2008 (Table 6)

On the other hand, estimates on the density of beds per 10000 persons were only available from urban regions as obviously the hospitals are centralized in cities and towns. Whereas, 30 beds serving 10000 persons in big cities, less than 20 beds available for the same number of persons in the rest of Egypt. While 13 doctors serving

10000 urban citizens only 2 doctors serve the same density of rural citizens. The high ratio of the nurses to doctors in rural regions versus urban regions, probably, not only, implies the much less doctors available in rural regions but it also indicates that rural females, prefer to work as nurses within the vicinity of their home villages for social reasons and also because other employment opportunities in these areas are rare.

Indicators of Education System Performance

The Egypt Human Development Report of 2010 (UNDP, 2010) measures education System Performance as a basic human development criteria by using a weighted average of literacy rate (of age 15 years +) and combined basic, secondary and tertiary (higher education) as a gross enrolment ratio for all educational levels. This is because data on enrolment by age are not available, especially, for primary education ratios. Enrolment in university and higher education by governorate is not available. The combined gross enrolment ratios for various governorates are derived after distributing total tertiary enrolment at the national level according to the relative shares of the governorates in pre-university (basic and secondary) enrolment. Literacy rate is the percentage of young people who can, with understanding, both read and write a short simple statement related to their everyday life. This data is published through population censuses and CAPMAS provided data on the illiterate population.

Literacy rates are almost the only available educational indicator available instantly for both rural and urban areas (Ministry of Education and CAPMAS, 2007). The number of students (enrolled or graduated), teachers, classes etc, are extracted from the annual bulletins of the concerning ministries (Per university education and Higher education). The number of people in the age groups corresponding to different educational level is estimated by applying "Sprague Multipliers" to the number of population by age groups. The estimation is issued by CAPMAS. However, some of the enrolment and transition ratios exceed 100% due to the number of students above (or below) the age limits of the education level.

As the rural regions are the ultimate target estimates of this study, several indicators were omitted because of the absent values for rural areas in the approved public references. The presented estimates are for the year 2008, except the literacy rate is for the year 2006. Only three types of estimates were presented in (Table 7, Table 8, Table 9). These are literacy rate, structure of basic and secondary Education and youth unemployment rate by education level and poverty status.

It is concluded from the estimates in the three successive tables that the least literacy rate is in Upper Rural Egypt, i.e. about 57%. Even though, the highest rate is of the Urban Lower Egypt, i.e. around 79%, there is still more than one fifth are illiterate (Table 7). Even though, the bulk of enrolled pupils up to secondary schools level are in technical programs schools (Table 8), the issue is the job opportunities of such young people after graduation. As shown in earlier section of this study that the unemployment is concentrated among youth in Egypt, the question is what is the impact of education level on unemployment, and consequently on poverty status of these unemployed and educated categories? The answer can be derived from the estimates in (Table 9), while the unemployment rate is among university graduates, the lowest rate is among the secondary schools graduates.

High unemployment among youth raises the probability of being poor among university graduates higher than among the unemployed secondary graduates. It seems that university graduates are less flexible in accepting jobs that do not match with their certificates.

Table 7 Literacy Rate (15+ Years Old) (%)

Region	Urban Governorates	Lower Egypt			Upper Egypt			Egypt		
		Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural
Literacy Rate (15+) (%)	77.6	77.2	78.8	65.8	64.4	76.9	57.1	70.4	78.1	62

Source: Extracted from: UNDP) United Nations Development Program and the Institute of National Planning, Egypt (2010) "EHDR 2010" Egypt Human Development Report of 2010 on Youth in Egypt: Building our Future" the project document EGY/01/006

Table 8 Structure of Basic and secondary Education (%)

Region	Basic and secondary enroll (% of total enrollment)			
	Private	Public	Technical	Total
Urban governorates	5.7	12.6	81.7	100
Lower Egypt	12.7	1.2	86.1	100
Upper Egypt	11.2	2.5	86.3	100
Egypt	11	3.4	85.6	100

Source: Extracted from: UNDP) United Nations Development Program and the Institute of National Planning, Egypt (2010) "EHDR 2010" Egypt Human Development Report of 2010 on Youth in Egypt: Building our Future" the project document EGY/01/006

Table 9 Youth Unemployment (%) by Education Level and Poverty Status, 2008-09

Standard of Living	Secondary	Above Secondary	University or Higher Education
Poor	16.1	28.7	29.4
Non-Poor	14.3	21.3	25.3
All Youth	14.7	22.3	25.6

Source: UNDP) United Nations Development Program and the Institute of National Planning, Egypt (2010) "EHDR 2010" Egypt Human Development Report of 2010 on Youth in Egypt: Building our Future" the project document EGY/01/006

Migration Indicators

Migration broadens young people's opportunities and offers them a way to earn higher income and gain skills. The World Bank (2004) estimates that 190 million people in the world live outside their countries, with 82% of this group migrating from poor countries to countries in the North.

Factors Affecting migration aspirations

Although many Egyptian youths aspire to migrate, few actually succeed to do so. According to SYPE, (2010) 15% of Egyptian youth, 18-29 years old, aspire to go live or work abroad, but only 1.6% had managed to do so. It should be kept in mind that the survey covers young people currently living in Egypt at the time of the survey and thus only includes information on non-migrants and return migrants. It is by now well established that migration from Egypt is mostly made up of temporary migration to other Arab countries, whereas the proportion

of return youth migrants from European destination countries is almost negligible, perhaps because those who go there do not return (UN Department of Social and Economic Affairs, 2009)

Gender is the most important determining factor for both migration and migration aspirations. The proportion aspiring to migrate varies from 27% for men to 6% for women (El-Kogali, S., and E. Suleiman, 2001). Education appears to be another powerful motivator for migration of both young men and young women. The aspiration of immigration increases steadily with education. It ranges from 4.5% for those with no formal school certificates to 20.9% for those with university education. The difference across educational levels is more pronounced for women than for men, ranging from 1% for those without certificates to 12.5% for those with university education (ILO and Ministry of Manpower and Migration, 2009). Younger youths tend to have somewhat higher migration aspirations than older youths. Urban slum residents have higher migration aspirations than either rural or urban non-slum residents, but the differences are not large. Finally, there is no systematic variation in migration aspirations by household wealth for young men, though they do increase steadily with wealth for young women. It means that women migration is associated more with social aspects rather than economic ones.

Factors Affecting the Ability to Migrate

Like migration aspirations, actual migration rates also vary strongly by gender. Whereas, 2.5% of men 18-29 years old, having migrated and returned only, 0.9% of women, same age, have done that. Actual migration rates increase significantly with education. University-educated young men are nearly 3.5 times as likely to migrate as men with no school certificate, and university educated women are more than 8 times more likely to migrate than their counterparts with no school certificate. However, in contrast to migration aspirations, the ability to migrate also depends strongly on age, place of residency and household wealth, and this dependence differs significantly by gender. Men of 24 years and older are much more likely to migrate than younger men, but there is practically no difference in migration rates by age for women. Similarly, men from urban slums and from rural areas are much more likely to migrate than men from urban non-slum areas. In contrast, women from urban non-slum areas are more likely to migrate than women from either urban slums or rural areas. In fact, migration rates from the urban non-slum milieu are practically equal for men and women. Finally, both men and women from richer households are more likely to migrate than their counterparts from poorer households, with differences being much larger for women (El-Kogali S. and Al-Bassusi N., 2001).

The increase in both migration aspirations as well as actual migration with educational attainment reflects the role of education in raising young people's professional expectations and aspirations besides its enabling role in facilitating migration. Whereas the fact that migration aspirations don't depend strongly on wealth and urban-rural residency, unlike education, these factors contribute more to young people's ability to realize their aspirations rather than to shaping these aspirations themselves. (Migration (DRC), 2007).

Motivations for Migration

Turning to the motivations for migration that affect both aspiring and actual migrants report, the distinction must be made between push factors relating to conditions in Egypt and pull factors relating to countries of destination, associated with gender.

With respect to motivations related to conditions in Egypt, male return migrants mention the absence of job opportunities (51%), poor living conditions (33.9%), the relatively low income in Egypt compared to other countries (33.0%), the need to assist their families financially (14.7%), and the need to earn money (12.7%). The figures don't add up to 100% because each individual can report more than one motivation. Female return migrants almost always mention family related reasons for migrating, including migrating with family (62.9%) and family reunification (40.4%).

With regards to motivations relating to destination countries, male migrants are more likely to mention job-related reasons, like having a job offer (70.9%), whereas female return migrants mention having relatives there (77.1%). Equal proportions (10%) mention wanting to live abroad. Aspiring male migrants are also driven primarily by economic motivations. When asked about what pull factors motivate them to migrate, almost 95% mentioned making money. The motivations of female aspirants were much more diverse (ILO & Ministry of Manpower and Migration, 2010).

Another characteristic which is similar across youth quintiles in SYPE, (2010) is the intent to travel to another country to live, work or study. The range moves from a low of 13% for the second quintile to a high of 19% for the fourth quintile. In terms of emigration as a coping mechanisms, the young and poor in Egypt (aged 18-29)

are shown to have equal or almost equal access to travel and migration in search of job opportunities in Egypt and abroad. For those who travel to the Arab countries or abroad, their job opportunities are mostly in the farming and construction sectors as unskilled labor. These opportunities have been the main source of savings in the form of remittances which are subsequently used to engage in projects as young entrepreneurs (Zohry, A. and Harrell-Bond, B., 2003).

Countries of Intention for Migration

According to ILO & Ministry of Manpower and Migration (2010)**Erreur ! Signet non défini.**, there are 1.9 million temporary Egyptian migrants working outside Egypt.⁷ The majority of these temporary migrants (87.6%) are in Saudi Arabia, Libya, Jordan and Kuwait. The SYPE (2010) data includes information on intention to migrate among youth. More than 28% of male youth expressed their intention to migrate. The intention to migrate is skewed by gender, as only 5.9% of females expressed their intention to migrate. This yields a total of 15.6% of youth of both genders having the intention to migrate. Saudi Arabia, Kuwait and United Arab Emirates were the main attraction of this group.

The non-Arab countries, to which young people, showed intention to migrate to include Italy, the United States, France and Germany. They are predominately male, with 78.6% of those who expressed the intention to migrate being young males (18-29 years old). Data shows that the socio-economic background is positively correlated with the intention to migrate, as those who showed intention to migrate are coming from the highest socio-economic level. Place of residence does not have a great impact on the intention to migrate, as youth who had the intention to migrate come from both urban and rural areas in similar rates.

Internal Migration

With respect to internal migration, (Table 10), shows high proportion of Cairo and Giza population are from internal migration. This may be due to the increase in the numbers of slum dwellers in Cairo and Giza which amounted to more than 6 million people, representing about 50% of slum dwellers in Egypt in January 2008 (ILO, 2008). According to data from the Central Agency for Public Mobilization and Statistics some studies point to the negative impact on the educational process of these massive immigrations into peril-urban metropolitan region "Cairo and Giza" (El-Kogali, S., and E. Suleiman, 2001). Also, the three cities along the western bank of Suez canal, Port Said, Ismailia and Suez, have showed the highest rate of migration among their populations. However, the reasons were mainly due to dual migration (out from and to) during wars at Suez canal borders over the period 1967-1973 (UN 2009).

Table 10 Internal Migration as % of total population in 2008

Region	internal migration	Region	internal migration
Cairo	11.9	Beni Suef	2.2
Alexandria	6.7	Fayoum	0.6
Port Said	34	Menia	0.7
Suez	37.9	Asyut	1.2
Ismailia	31.3	Suhag	0.6
Damietta	5.4	Qena	1.4
Dakahlia	1.9	Luxor	1.3
Sharkia	4.6	Region	3.6
Kalyoubia	14.4	Red sea	28.7
Kafr El Sheikh	2.6	New valley	16.7
Gharbia	1.7	Matrouh	13.5
Menoufia	2.1	North Sinai	14.1
Behera	4.1	South Sinai	27.4
Giza	20.4	EGYPT	6.6

Source: collected from data of several issues of "The official Labor Force Survey", carried on a quarterly basis and published by the Central Agency for Public Mobilization and Statistics (CAPMAS), over the period 2005-2009

Agricultural Resources

This section provides a profile of agricultural resources use. Agricultural resources include land use, water resources and energy consumption pattern in Egypt. The balance between such usafes and population distribution and density were, primarily, considered.

Agricultural Land

Table 11, shows that whereas, the New land (reclaimed) area is estimated around 808,752 hectares, representing 23% of the total cultivated area, and its crop area reached about 124,122,6 hectares with the crop density coefficient around 1.53, the cultivated old land surpassed 2,732,772 hectares and its Cropped Area around 2,732,772 hectares, with a Crop Intensification Coefficient 1.9. Therefore the total cultivated area reached about 3.5 million hectares with a cropped area of about 6.4 million hectares, i.e. the aggregate intensification coefficient approached 1.8 crops a year.

The total area of Egypt is around 1 million Km², even though, 78% of Egypt's land is located within the frontier governorates region, with only about 2% of the population (Table 12). Urban governorates population is 18% lives only on 1.65 of Egypt land and 43% of the population within Lower Egypt boundaries live on 3.3% of the total land. Apparently, population /Land density in Egypt looks very moderate, i.e. about 74 persons per 1-KM². However, regional-wise there is very high inequality allocation pattern between land and people. The population density per 1-Km² shows a very high dispersion. While It is only 1.7 person in frontiers governorates it is very intensive in both lower Egypt and Urban governorates, i.e. about 947 and 848 per 1-Km², respectively.

Table 11 Share of New Reclaimed land in Total Cultivated Land in Egypt (2007)

Type of Agricultural Land	Total	Old Land	New Land
Cultivated Area (Hectare)	3541524	2732772	808752
% Land Area	100%	77%	23%
Cropped Area (Hectare)	6399414	5158188	1241226
Crop Intensification Coefficient.	1.81	1.89	1.53
Population	74,295,505	74,295,505	74,295,505
Person/Hectare	21.0	27.2	91.9

Source: Calculated from: Ministry of Agriculture and Land Reclamation, Egypt (2010) "Agricultural Statistics Year Book", Issues by the sector of Agricultural Economics and Statistics

Most of cultivated area is concentrated in Lower Egypt region, i.e. about 58%, which is the area of Nile delta. Upper Egypt cultivated area expands as a thin green lines along the Nile valley till Sudan border with a share of only 6.5% of the total cultivated area. The urban governorates are surrounded by about 10% of the total cultivated area which are also a part of the Nile Delta. Accordingly, the share of cultivated land per capita in Egypt is within a very microscopic range. It is estimated as: 115, 617, 409 and 2114 square meters for Urban Governorates, Lower Egypt, Upper Egypt, and Frontier Governorates, respectively, with a national average around 477 M2 /capita, (Table 12).

Table 12 Agricultural Land in Egypt by Region in 2007

Region		Urban Governorates	Lower Egypt	Upper Egypt	Frontier Governorates	EGYPT
Population		13,350,800	31,953,080	27,690,449	1,333,813	74,295,505
%		18.0%	43.0%	37.3%	1.8%	100%
Land area (Km2)		15,738	33,749	175,367	784,596	1,009,450
%		1.6%	3.3%	17.4%	77.7%	100.0%
Population Density (Person/ Km2)		848.3	946.8	157.9	1.7	73.6
Cultivated area	Hectares	153,426	1,972,152	1,133,916	282,030	3,541,524
	% Land Area	9.7	58.4	6.5	0.4	3.5
	Hectare/Capita	0.011	0.062	0.041	0.211	0.048
	M ² /Capita	115	617	409	2114	477
Cropped Area	Hectares	285,012	3,701,502	2,064,762	348,096	6,399,414
	Intensification Coefficient	1.86	1.88	1.82	1.23	1.81

Source: calculated from: Ministry of Agriculture and Land Reclamation, Egypt (2010) "Agricultural Statistics Year Book", Issues by the sector of Agricultural Economics and Statistics

Water Resources

Almost all water resources in Egypt are from Egypt's Nile quota (97.9% of the total). Per capita share is currently below the water poverty line, i.e. about 757 m3 (Table 13). Irrigation water for agriculture sector charges the major share (74%) of water resources of Egypt. Municipal and industries consume, 22%, with equal share for each. Fish Farming utilizes only 1.2%. However, uses of sweet fresh by fish farming **is illegal by law**. **Water**

resources have become, recently, the most critical constrain of development, not only in Egypt, but also in Middle East region (United Nations, 1987).

Energy Resources and Utilization

In lights of analysis of the Energy recourses usages in Egypt as shown in (Table 14), it should mentioned that available official data on energy consumption pattern lack of some important detail, which are not permissible. The authorities allow only a solid figure of Net import of primary energy, which, suppose, includes foreign partner's exports of oil and natural gas and the pay back of the surplus of the crude oil. Therefore, Imports do not include crude oil and natural gas purchased by Egypt in foreign currency from the foreign partner's share.

Table 13Water Resources consumption Pattern in Egypt

Water Resource Indicators *	Volume,
Total water resources billion m3	58
Water consumption (% of total water resources)	74.8
Internal renewable water (% of total water resources)	97.9
Per capita Internal renewable water m3/year	757
Water withdrawals by (%) agriculture	73.9
Municipal	10.8
Industrial	11
Navigation	0.3
Fish wealth**	1.2
Total fish catch Thousand tons	1008
Fish catch from (%)	
(Nile water + Naser lake)	11.6
(Mediterranean + Red sea)	13
Other Lakes	12.4
Aqua culture Farms	63

*Data of the year 2008, ** Data of the year 2007

Source: Derived from the Ministry of Water Resources and Irrigation (2010) "Files of the Planning Sector", Cairo, Egypt.

Even though, the total primary energy consumption of Egypt was 67.5 million tons of oil equivalents in 2008, the total final energy consumption was 46.9 million tons of oil equivalents. It should be mentioned that the final energy consumption is calculated by excluding the quantity of energy sources consumed as inputs for producing another source of energy, e.g. the use of natural gas or oil products in the production of electrical energy, (Table 14). Whereas, Egypt exports oil, the net primary energy imports were 34.5% of the total primary energy consumed in 2008. To generate US\$1000 of GDP in Egypt requires 88.6 of Kg of oil equivalent. While oil provides 53% of the final energy consumption, natural gas provides around 27%, electricity share is 20% and .06% is from coal. The hydraulic power generates a significant volume of electricity from High Dam and some main barrages in Egypt. While transportation is the main consumer of energy in Egypt (42% of the total final energy), followed by households sector (14%) agriculture consumes only 1.1%. Although energy retail price has been almost three folds its level since the onset of economic reform in 1990, its price is still receiving a high subsidy rate by government (Soliman, I., et al., 2007). There is currently a national plan to expand the renewal energy sources, particularly, wind energy and solar energy. The president of Egypt signed in September, 2010 a declaration to start the national project of generating atomic energy for Peace usages in Egypt.

Food Security Indicators

El Asfahani, A. and Soliman, I, (1989) provided a concept that showed three major criteria for food security: The political (self-sufficiency), economical (management of food and foreign trade balance) and Social (dietary adequacy of household). This section, presents food security indicators, in lights of those three criteria

Self-Sufficiency Ratio

The food self- sufficiency ratio is computed by dividing the domestic production of a certain commodity (or a homogeneous group of commodities) over the aggregate supply of the same set of food commodities in tons. The estimates in the table of self-sufficiency ratio (R) were sorted ascending-wise.

Table 14Energy Consumption Pattern in Egypt in 2008

Energy Consumption Indicators	Volume
Total primary energy consumption (million tons of oil equivalent)	67.5
Primary energy consumption per capita (Kg of oil equivalent)	908.2
Primary energy consumed in Kg of oil equivalent /1000 EGP of GDP*	88.6
Net Primary energy imports (% of primary energy consumed)	-34.5
Total final energy consumption (million tons of oil equivalent)	46.9
Final energy consumed (%)from: Oil product	53.3
Gas	27.1
Electricity	19.6
Coal	0.06
Final energy consumed (%) by Sector:	42
Transportation	26.5
Agriculture	1.1
Households & commercial	13.8
Other	16.6

Source: Adapted from: (1) Ministry of State for Economic Development (2010) "the 2007/2008 Follow up Report of the Economic and Social Development Plan", Cairo, Egypt, and (2) Ministry of Petroleum & the Egyptian General Petroleum Authority "Report of the Work Results of the Petroleum Affairs Sector in 2007/2008", Cairo, Egypt.

The results were classified into four groups full import commodity markets (R= zero %), net import commodity markets (R<100%), self-sufficient commodity markets (R= 100%), net Export commodity markets (R>100%). The analysis made for the year 2007, as the most recent available data. Estimates are presented in the table of (Annex 1). This classification implies, more adequately, the dependency ratio of the food market in Egypt. It is concluded from the estimates in annex 1 that there are only 19 commodities which recognize net exports markets of excess domestic production beyond local consumption. These are: Dates, Tomatoes, Bananas, Sweet Potatoes, , Lemons, Limes, Grapes, Olives, Total Alcoholic Beverages, Shelled Groundnuts, Oranges & Mandarins, Olive Oil, Honey, Potatoes, Onions, Milled Rice, Cream, Non-Food Alcohol, some Other Vegetables and Fruits. At extreme there are 11 commodities that are fully imported, with zero production. These are Coconut, Palm kernel Oil, Palm Oil, Coconut Oil, Maize Germ Oil, Pineapples, Stimulants, Coffee, Cocoa Beans, Tea, and Pepper. On other hand there are 11commodities recognized full self-sufficiency in Egyptian market from domestic production. These are Rye, Sorghum, Cottonseed, Groundnut Oil, Citrus, Wine, Beer, Alcoholic Beverages, Raw Animal Fats and Table Eggs. The rest o food markets are under net imports category, i.e. domestic production is not sufficient to cover domestic consumption.

Dietary Consumption Pattern

The dietary pattern of daily food intake of the Egyptian consumer is presented in (Table 17). The average calories intake was around 3159, i.e. much higher the average healthy nutrition allowances which is about 2300 Kcal./ Capita/ Day (Soliman and Eid, 1995) and the average gross protein contents of the daily food intake was quite reasonable of about 93 grams. However, the inadequacy stems from the food intake quality, rather than, the available quantity. There is a deficit in animal protein intake. The healthy nutrition allowance indicates 30 grams per capita per day or around one-third of gross protein intake (El Asfahani, A. and Soliman, I, 1989). The current consumption as shown in (Table 15) shows that the average animal protein consumption is around 22% of gross protein or around 20.5 grams per day. Even though, the national average food intake (Kcal) showed that there is no under or malnutrition status, the analysis should be expanded to include income categories in both urban and rural regions. This issue requires a specialized forthcoming study.

Table 15 Average Egyptian Daily Food Intake Pattern

Food Item	Food supply		Protein supply quantity	
	(kcal/capita/day)	%	(g/capita/day)	%
Total Cereals	2023	63.3	55	59.5
Wheat	1093	34.2	33.1	35.8
Milled Rice Equivalent	388	12.1	7.5	8.1
Wheat + Rice	1481	46.4	41	43.9
Other Cereals	542	16.9	14	15.6
Total Sugar & Sweeteners	245	7.7	0	0
Total Vegetal Products	2918	91.3	71.9	77.8
Total Animal Products	276	8.6	20.5	22.2
Grand Total	3195	100	92.4	100

Source: Calculated from: Food And Agriculture Organization Of The United Nations: FAOSTAT/ SUAFBS/Food Balance Sheet/ (17 September 2010), <http://faostat.fao.org/site/368/default.aspx#ancor>

Trade Performance in National Economy

As cited above the economic criteria measures how the food and foreign trade balance was managed within the national economy performance, (Table 16). The table shows that exports of Egypt hardly covered 15% of the GDP, while imports absorbed almost one third of GDP in 2008, i.e. exports covered only one-half of imports bill in that year. While food exports occupied around one-fourth of merchandise exports in 2008, food imports occupied about 28% of merchandise imports in 2008. As trade dependency ratio is around 50%, it means that the Egyptian economy is highly dependant on international prices trend.

Table 16 Foreign Trade in Egyptian Economy in 2008

Economic Indicator	Estimate Value (%)
Exports revenue (% of GDP)	15.3
Imports value (% of GDP)	32.8
Trade dependency (Exports + Imports) (%) of GDP	50.5
Exports/ Imports ratio (%)	55.6
Food imports (% of merchandise exports)	28.3
Food exports (% of food imports)	24.7
Trade dependency (Exports + Imports)/ (GDP)	50.5

Source: Calculated from: Ministry of State for Economic Development, Central Agency for Public mobilization and Statistics (CAPMAS) (2010) "Statistics Year Book "the web site of the Ministry of State for Economic Development., URL: <http://www.mop.gov.eg/english/english.html>, September, 18, 2010

Food and Agriculture in National Economy

Table 18 presents the macro economic analysis of the Egyptian economy. While agricultural products were 13.2% of GDP, Services constitute more than 54% of the GDP. Slow agricultural production growth, i.e. 2% a year was not enough to cover the demand growth due to population growth in addition to economic growth. While exports revenue was only 15.3% imports revenue was 32.8% of GDP in the same year. Whereas total exports covered only 56% of total imports, food exports covered one-fourth of food imports, in 2008, (Table 17). Trade dependency was almost one-half of GDP. Such macro economic analysis showed that Egyptian economy is highly dependent on world market and its structure depends mainly on service outputs. While imports value is two fold the exports revenue, food imports bill absorbs high proportion of merchandise exports revenue.

Table 17 The Major Macroeconomic Indicators

Economic Indicator	Estimate Value
Total GDP at current market prices (EGP, billions)	896.5
Agricultural production (% of GDP)	13.2
Industrial products (%of GDP at factor cost)	16.3
Services (% of GDP at factor cost).	54.1
per capita Food production Annual Growth Rate % (1999= 100)	2
Months of import coverage by National Monetary Reserves	7.9

Source: Calculated from:

(1) Ministry of State for Economic Development, Central Agency for Public mobilization and Statistics (CAPMAS) (2010) "Statistics Year Book "the web site of the Ministry of State for Economic Development., URL: <http://www.mop.gov.eg/english/english.html>, September, 18, 2010

(2) Ministry of Agriculture and Land Reclamation (2007) "Agricultural Income Bulletin"

It should be mentioned that the foreign trade performance indicators shown in (Table 18) such as food exports/Imports ratio and the food dependency ratio presents the economic concept of food security (El Asfahani, A. and Soliman, I, 1989). Relying upon the concepts of the same previous study, the analysis of the self sufficiency ratios of the sets of food commodities presented earlier in (Table 17) exemplify the political

concept of food security. If the nutrition status presented in (Table 17) has developed to the estimation of dietary adequacy at each household income categories in both urban and rural regions, this would provide the social criteria of food security.

Annex 1

Self-Sufficiency in Egyptian Food Market in 2007

Commodity	Production (tons)	Import Quantity (tons)	Stock Variation (tons)	Export Quantity (tons)	Domestic supply quantity (tons)	Self Sufficiency Ratio (%)
Full Import Markets						
Coconut, Including Copra	0	42000	0	4000	38000	0.0
Palm kernel Oil	0	14000	0	1000	13000	0.0
Palm Oil	0	261000	0	0	260000	0.0
Coconut Oil	0	7000	0	0	7000	0.0
Maize Germ Oil	0	16000	0	1000	15000	0.0
Pineapples	0	3000	0	0	3000	0.0
Total Stimulants	0	41000	0	3000	39000	0.0
Coffee	0	10000	0	0	10000	0.0
Cocoa Beans	0	9000	0	0	9000	0.0
Tea	0	22000	0	2000	20000	0.0
Pepper	0	6000	0	0	6000	0.0

Self-Sufficiency in Egyptian Food Market in 2007 (Continued)

Net import Market	Production (tons)	Import Quantity (tons)	Stock Variation (tons)	Export Quantity (tons)	Domestic supply quantity (tons)	Self Sufficiency Ratio (%)
Soya beans	26	1136	-200	0	962	2.7
Sunflower seed Oil	8	151	0	5	154	5.2
Pelagic Fish	42	263		1	304	13.8
Marine Fish, Other	31	125	0	2	153	20.3
Cephalopods	4	7		0	11	36.4
Other Oil crops,	12	18	0	4	26	46.2
Total Pulses	392	418	0	64	746	52.5
Total Offal	97	83		0	179	54.2
Wheat	7379	5921	-34	26	13241	55.7
Maize	6243	4490	0	7	10727	58.2
Crustaceans	17	12		0	29	58.6
Soybean Oil	150	96	0	3	243	61.7
Bovine Meat	590	323	0	1	912	64.7
Pig meat	2	2		0	3	66.7
Nuts	34	10	0	0	43	79.1
Butter, Ghee	116	29	0	0	145	80
Sunflower seed	29	0	8	4	33	87.9
Sesame seed	42	9	0	4	47	89.4
Apples	558	53	0	0	611	91.3
Sugar & Sweeteners	1985	455	10	288	2161	91.9
Total Milk products	83	12	10	16	88	95.9
Demersal Fish	5905	347	0	92	6160	96.5
Mutton & Goat Meat	333	12		0	345	96.8
Total Spices	61	3		0	63	97.1
Barley	178000	5000	0	0	183000	97.3
Cottonseed Oil	48000	2000	0	0	49000	98
Poultry Meat	653000	10000	0	0	662000	98.6
Freshwater Fish	576000	1000	0	0	577000	99.8

Self-Sufficiency in Egyptian Food Market in 2007 (Continued)

Self-sufficient Market	Production (tons)	Import Quantity (tons)	Stock Variation (tons)	Export Quantity (tons)	Domestic supply quantity (tons)	Self Sufficiency Ratio (%)
Rye	44000	5000	0	5000	44000	100.0
Sorghum	844000	0	0	0	844000	100.0
Cottonseed	335000	0	0	0	335000	100.0
Groundnut Oil	20000	0	0	0	20000	100.0
Citrus	3000	1000	0	0	3000	100.0
Pimento	46000	0	0	0	46000	100.0
Wine	4000	0	0	0	4000	100.0
Beer	284000	0	0	0	284000	100.0
Alcoholic Beverages	35000	0	0	0	35000	100.0
Raw Animal Fats	20000	1000	0	1000	20000	100.0
Table Eggs	240000	0	0	0	240000	100.0

Self-Sufficiency in Egyptian Food Market in 2007 (Continued)

Net Export Market	Production (tons)	Import Quantity (tons)	Stock Variation (tons)	Export Quantity (tons)	Domestic supply quantity (tons)	Self Sufficiency Ratio (%)
Dates	1314000	1000	0	5000	1310000	100.3
Tomatoes	8639000	14000	0	44000	8609000	100.3
Bananas	945000	5000	0	9000	941000	100.4
Sweet Potatoes	364000	0	0	7000	356000	102.2
Other Vegetables	8415000	11000	0	250000	8176000	102.9
Lemons, Limes	325000	0	0	10000	315000	103.2
Grapes	1485000	9000	0	55000	1439000	103.2
Olives	318000	0	0	10000	308000	103.2
Total Alcoholic Beverages	335000	1000	0	12000	324000	103.4
Groundnuts (Shelled)	152000	0	0	7000	146000	104.1
Other Fruits	1921000	60000	0	218000	1763000	109
Oranges & Mandarins	2803000	3000	0	279000	2527000	110.9
Olive Oil	10000	1000	0	1000	9000	111.1
Honey	8000	0	0	0	7000	114.3
Potatoes	2760000	75000	0	435000	2400000	115
Onions	1486000	0	0	201000	1285000	115.6
Milled Rice	4587000	115000	97000	1192000	3607000	127.2
Cream	5000	0	0	3000	2000	250
Non-Food Alcohol,	12000	1000	0	12000	1000	1200

Source: Calculated from: Food and Agriculture Organization of the United Nations/ FAOSTAT/ SUA/FBS/Food Balance Sheet/ (17 September 2010), <http://faostat.fao.org/site/368/default.aspx#ancor>

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